

## Coronavirus 2019 (COVID-19): COVID-19 Evaluation and Test Interpretation Algorithms for Healthcare Providers

This guidance is designed to help healthcare providers (HCPs) determine when to test for SARS-CoV-2 and how to interpret test results. It does not cover all potential scenarios but rather provides a framework that allows healthcare providers to apply their clinical judgment based on each patient's symptoms and potential exposures. For additional information, see [coronavirus.dc.gov/phasetwo](https://coronavirus.dc.gov/phasetwo).

### General Information:

There are two categories of tests available for diagnosing a current COVID-19 infection: PCR (polymerase chain reaction) and antigen tests. PCR tests are the gold standard for the diagnosis of COVID-19, with high sensitivity and specificity. Antigen tests are quick, inexpensive and convenient but are less sensitive than PCR tests. Antigen tests perform best in persons with symptoms consistent with COVID-19 infection. The interpretation of antigen test results in other clinical scenarios is less straightforward. Serology testing detects antibodies made in response to a past infection with SARS-CoV-2 and should not be used to diagnose active infection. For additional information, please refer to *PCR, Antigen and Antibody Tests* at [coronavirus.dc.gov/phasetwo](https://coronavirus.dc.gov/phasetwo) and to the DC Health Notice *SARS-CoV-2 Antigen Testing-Outpatient Settings* at [dchealth.dc.gov/page/health-notices](https://dchealth.dc.gov/page/health-notices).

### Quarantine Recommendations:

Close contacts of persons with confirmed COVID-19 must quarantine. A close contact is someone who was within 6 feet of an infected person for at least 15 minutes over a 24-hour period, while the person was infectious. While 14-day quarantine is the safest option, ending quarantine after 10 days may be acceptable. Close contacts who end quarantine after 10 days should continue to self-monitor for symptoms for a full 14 days. For more information regarding quarantine please see *Guidance for Quarantine after COVID-19 Exposure* at [coronavirus.dc.gov/phasetwo](https://coronavirus.dc.gov/phasetwo).

### Reinfection:

Current evidence suggests that reinfection is uncommon during the initial 90 days after symptom onset of a preceding SARS-CoV-2 infection (or 90 days after a positive test date for asymptomatic infections). For patients recovered from SARS-CoV-2 infection, a positive PCR without new symptoms during this 90-day time frame is more likely to represent persistent shedding of viral RNA than reinfection.

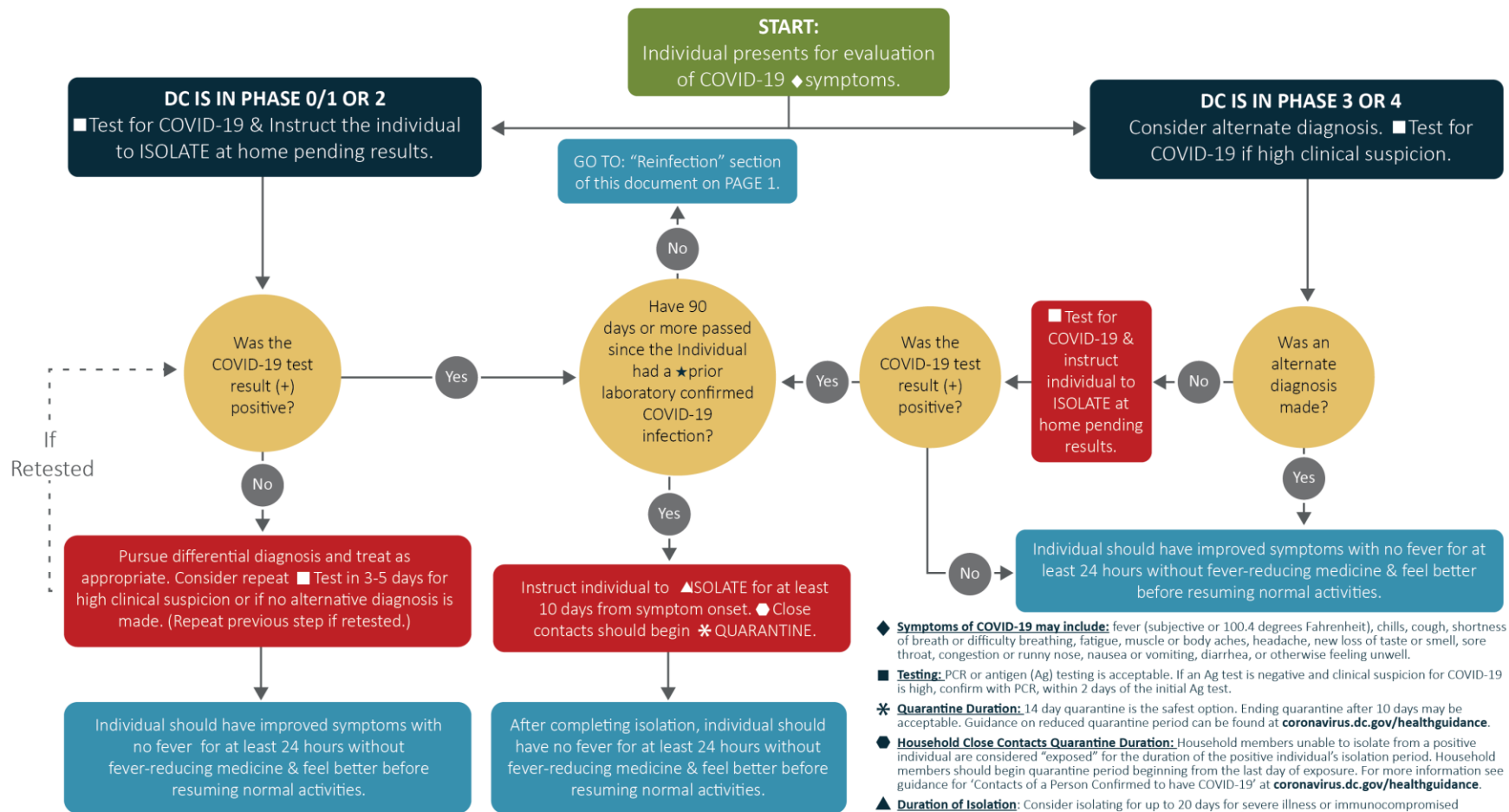
- Determination of a possible reinfection should be made on a case-by-case basis.
- For **asymptomatic** patients, re-testing is unlikely to yield useful information even if the patient had close contact with an infected person.
- If a patient develops new **symptoms** of COVID-19 during this 90-day period and an evaluation fails to identify an alternative diagnosis (e.g., influenza), then the patient may

warrant re-evaluation for SARS-CoV-2 reinfection in consultation with an infectious disease expert.

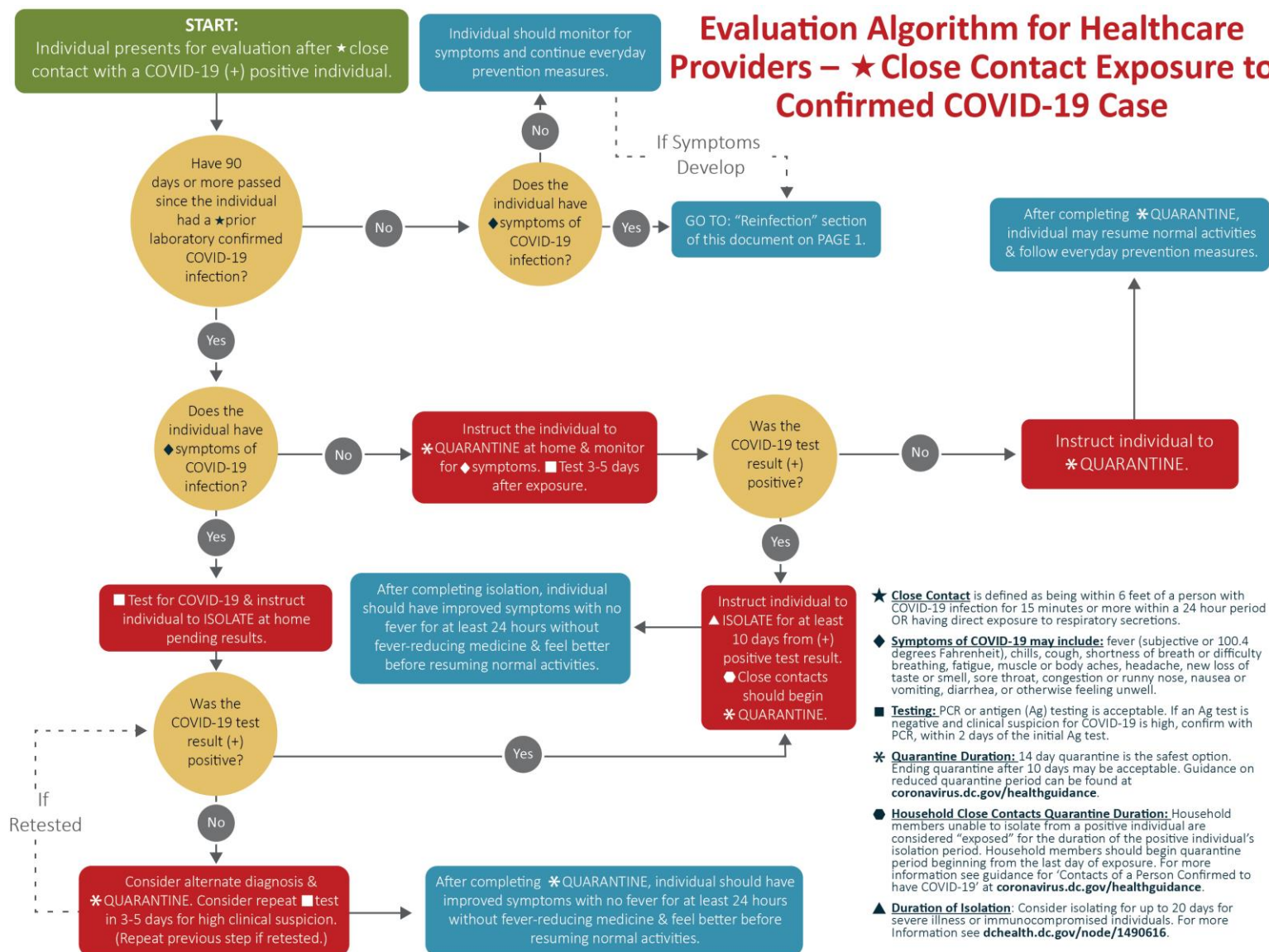
- Consider isolation and testing, particularly if there is a known exposure within the preceding 14 days. If reinfection is confirmed or remains suspected, patients should continue isolation until criteria for discontinuation is met.
- Recovered patients with subsequent re-exposure to SARS-CoV-2 <90 days from a preceding infection and without symptoms do not need to undergo repeat quarantine.
- For more information about reinfection, refer to the Centers for Disease Control and Prevention (CDC) article Duration of Isolation and Precautions for Adults with COVID-19 at [cdc.gov/coronavirus/2019-ncov/hcp/duration-isolation.html](https://www.cdc.gov/coronavirus/2019-ncov/hcp/duration-isolation.html).

For more information about isolation and discontinuation of isolation please see *Guidance for Persons Who Tested Positive for COVID-19* and *Interim Guidance on Discontinuation of Transmission-Based Precautions for Patients with Confirmed or Suspected COVID-19 in Healthcare Settings* at [coronavirus.dc.gov/phasetwo](https://coronavirus.dc.gov/phasetwo).

## Evaluation Algorithm for Healthcare Providers – Symptoms & No Known Exposure



## Evaluation Algorithm for Healthcare Providers – ★ Close Contact Exposure to Confirmed COVID-19 Case



- ★ **Close Contact** is defined as being within 6 feet of a person with COVID-19 infection for 15 minutes or more within a 24 hour period OR having direct exposure to respiratory secretions.
- ◆ **Symptoms of COVID-19 may include:** fever (subjective or 100.4 degrees Fahrenheit), chills, cough, shortness of breath or difficulty breathing, fatigue, muscle or body aches, headache, new loss of taste or smell, sore throat, congestion or runny nose, nausea or vomiting, diarrhea, or otherwise feeling unwell.
- **Testing:** PCR or antigen (Ag) testing is acceptable. If an Ag test is negative and clinical suspicion for COVID-19 is high, confirm with PCR, within 2 days of the initial Ag test.
- ★ **Quarantine Duration:** 14 day quarantine is the safest option. Ending quarantine after 10 days may be acceptable. Guidance on reduced quarantine period can be found at [coronavirus.dc.gov/healthguidance](https://coronavirus.dc.gov/healthguidance).
- **Household Close Contacts Quarantine Duration:** Household members unable to isolate from a positive individual are considered "exposed" for the duration of the positive individual's isolation period. Household members should begin quarantine period beginning from the last day of exposure. For more information see guidance for "Contacts of a Person Confirmed to have COVID-19" at [coronavirus.dc.gov/healthguidance](https://coronavirus.dc.gov/healthguidance).
- ▲ **Duration of Isolation:** Consider isolating for up to 20 days for severe illness or immunocompromised individuals. For more information see [dchealth.dc.gov/node/1490616](https://dchealth.dc.gov/node/1490616).

## Test Interpretation for Healthcare Providers

Reason for Visit/Question	Has the person had symptoms?	Type of COVID-19 test	Recommendations
Positive SARS-CoV-2 Test Result	NO	PCR test	<ul style="list-style-type: none"> <li>Isolate. For information about when to discontinue isolation, see DC Health Notice <a href="#">Updated Priorities for COVID-19 Testing, Guidelines for Reporting, and Discontinuation of Home Isolation</a>.</li> <li>The DC Health Contact Trace Force will follow up to conduct a case investigation.</li> <li>Instruct patient to make a follow-up appointment for evaluation if symptoms develop.</li> </ul>
		Rapid antigen test	<ul style="list-style-type: none"> <li>Isolate and send confirmatory PCR testing in asymptomatic patients due to low pretest probability of test in this scenario.</li> <li>Confirmed positive results should continue isolation per DC Health Guidance.</li> <li>Patients with confirmed negative results may resume normal activities and follow everyday precautions.</li> </ul>
	YES	PCR test	<ul style="list-style-type: none"> <li>Isolate. For information about when to discontinue isolation, see DC Health Notice <a href="#">Updated Priorities for COVID-19 Testing, Guidelines for Reporting, and Discontinuation of Home Isolation</a>.</li> <li>The DC Health Contact Trace Force will follow up to conduct a case investigation.</li> <li>Instruct patient to make a follow-up appointment if symptoms worsen or do not improve, or to seek emergency treatment as necessary.</li> </ul>
		Rapid antigen test	<ul style="list-style-type: none"> <li>Isolate. For information about when to discontinue isolation, see DC Health Notice <a href="#">Updated Priorities for COVID-19 Testing, Guidelines for Reporting, and Discontinuation of Home Isolation</a>.</li> <li>The DC Health Contact Trace Force will follow up to conduct a case investigation.</li> <li>Instruct patient to make a follow-up appointment for evaluation if symptoms worsen or do not improve, or to seek emergency treatment as necessary.</li> </ul>

Reason for Visit/Question	Has the person had symptoms?	Type of COVID-19 test	Recommendations
<b>Negative SARS-CoV-2 Test Result</b>	NO	PCR	<ul style="list-style-type: none"> <li>If tested because of recent known exposure/close contact, quarantine for at least 10 days from date of last contact (please follow employer guidance for returning to work). Instruct patient to self-monitor for development of symptoms for 14 days.</li> <li>All other patients with confirmed negative results may resume normal activities and follow everyday precautions.</li> </ul>
		Rapid antigen test	<ul style="list-style-type: none"> <li>If tested because of recent known exposure/close contact, continue to quarantine for at least 10 days from date of last contact. Self-monitor for development of symptoms for 14 days.</li> <li>Use of antigen tests in asymptomatic patients with no exposure is off-label and not recommended as results are difficult to interpret. Negative results in this group should be treated with caution if exposure risks are reported (e.g., travel, group activities), and patients should continue to practice everyday prevention measures.</li> </ul>
	YES	PCR	<ul style="list-style-type: none"> <li>Perform clinical evaluation to determine if there is an alternative diagnosis for the symptoms.</li> <li>Consider repeat testing if clinically indicated.</li> </ul>
		Rapid Antigen Test	<ul style="list-style-type: none"> <li>Send confirmatory PCR testing in symptomatic patients due to high pretest probability. Patient should isolate until results are returned.</li> <li>If confirmatory results are negative, and patient was tested because of recent known exposure/close contact, instruct patient to continue quarantine for at least 10 days from date of last contact and self-monitor for development of symptoms for 14 days.</li> <li>Confirmed positive results should continue isolation per DC Health Guidance.</li> </ul>

The guidelines above will continue to be updated as the outbreak evolves. Please visit [coronavirus.dc.gov](https://coronavirus.dc.gov) regularly for the most current information.